| 1000 | Application No. | Applicant(s) |
|--|--|------------------------------|
| • • | 10/530,936 | ARRAS ET AL. |
| Notice of Allowability | Examiner | Art Unit |
| | LINIU BLACK | 2162 |
| | LINH BLACK | 2163 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. | | |
| I. X This communication is responsive to 4/8/05. | • | |
| 2. The allowed claim(s) is/are <u>18-41</u> . | | |
| 3. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some* c) ☐ None of the: 1. ☑ Certified copies of the priority documents have been received. | | |
| 2. Certified copies of the priority documents have been received in Application No | | |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the | | |
| International Bureau (PCT Rule 17.2(a)). | | |
| * Certified copies not received: | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | |
| 1. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 5. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
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| Attachment(s) I. ☑ Notice of References Cited (PTO-892) | 5. Notice of Informal P | atent Application |
| 2. ☐ Notice of Praftperson's Patent Drawing Review (PTO-948) | 6. Interview Summary | (PTO-413), |
| B. ⊠ Information Disclosure Statements (PTO/SB/08), | Paper No./Mail Dat 7. ☐ Examiner's Amendr | te nent/Comment |
| Paper No./Mail Date <u>4/8/05</u> 1. Examiner's Comment Regarding Requirement for Deposit | 8. 🛛 Examiner's Stateme | ent of Reasons for Allowance |
| of Biological Material | 9. | |
| Dors Von Z | | |
| DON WONG (| 3.33 | |

Art Unit: 2163

Reasons for allowance

1. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach the combination of limitations in the independent claims 18, 30, and 36, especially, "calculating a sorting sequence of fact numbers, said fact numbers identifying the data records;

calculating entry points for each dimension of the n-dimensional matrix presentation, each calculated entry point calculated to be linked with a corresponding fact number of the sorting sequence;

calculating a cardinality of the n-dimensional matrix presentation in dependence on the calculated sorting sequence and the calculated corresponding entry points;

and generating the n-dimensional matrix presentation based on the calculated cardinality and the calculated entry points."

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Johnson et al. (US 6334125) teaches method and apparatus for loading data into a cube forest data structure - the title; multi-dimensional database - col. 7, lines 49-64; cardinalities and sorting the tuple list for the updated subtrees - col. 21. Johnson et al. do not teach the combination of limitations taught above.

2. Dependent claims 19-29, 31-35, and 37-41 incorporate the listed limitations by reference and contain limitations that further distinguish over the art of record. For these reasons, claims 19-29, 31-35, and 37-41 are considered allowable over the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on Mon.-Thurs...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LINH BLACK

Examiner

Art Unit 2163

September 26, 2007

DON WONG

SUPERVISORY PATENT EXAMINER
**TECHNOLOGY CENTER 2100